WO 00/15799 PCT/US99/21688

What is claimed is:

25

A substantially purified polypeptide comprising an amino acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, and fragments thereof.

- 2. A substantially purified variant having at least 90% amino acid sequence identity to the amino acid sequence of claim 1.
 - 3. An isolated and purified polynucleotide encoding the polypeptide of claim 1.
- 4. An isolated and purified polynucleotide variant having at least 90% polynucleotide sequence identity to the polynucleotide of claim 3.
 - 5. An isolated and purified polynucleotide which hybridizes under stringent conditions to the polynucleotide of claim 3.
- 20 6. An isolated and purified polynucleotide having a sequence which is complementary to the polynucleotide of claim 3.
 - 7. A method for detecting a polynucleotide, the method comprising the steps of:
 - (a) hybridizing the polynucleotide of claim 6 to at least one nucleic acid in a sample, thereby forming a hybridization complex; and
 - (b) detecting the hybridization complex, wherein the presence of the hybridization complex correlates with the presence of the polynucleotide in the sample.
- 8. The method of claim 7 further comprising amplifying the polynucleotide prior to hybridization.
 - 9. An isolated and purified polynucleotide comprising a polynucleotide sequence selected from the group consisting of SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ

WO 00/15799 PCT/US99/21688

ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, and fragments thereof.

- 10. An isolated and purified polynucleotide variant having at least 90%
- 5 polynucleotide sequence identity to the polynucleotide of claim 9.
 - 11. An isolated and purified polynucleotide having a sequence which is complementary to the polynucleotide of claim 9.
- 10 12. An expression vector comprising at least a fragment of the polynucleotide of claim 3.
 - 13. A host cell comprising the expression vector of claim 12.
 - 14. A method for producing a polypeptide, the method comprising the steps of:
- a) culturing the host cell of claim 13 under conditions suitable for the expression of the polypeptide; and
 - b) recovering the polypeptide from the host cell culture.
- 15. A pharmaceutical composition comprising the polypeptide of claim 1 in conjunction with a suitable pharmaceutical carrier.
 - 16. A purified antibody which specifically binds to the polypeptide of claim 1.
 - 17. A purified agonist of the polypeptide of claim 1.

25

- 18. A purified antagonist of the polypeptide of claim 1.
- 19. A method for treating or preventing a disorder associated with decreased expression or activity of RNAAP, the method comprising administering to a subject in need of such treatment an effective amount of the pharmaceutical composition of claim 15.
 - 20. A method for treating or preventing a disorder associated with increased expression or activity of RNAAP, the method comprising administering to a subject in need of such treatment an effective amount of the antagonist of claim 18.